



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,950	05/16/2005	Yasunobu Saito	Nisshin-2(FP254US)	1677
7265                      7590                      12/15/2008 MICHAELSON & ASSOCIATES P.O. BOX 8489 RED BANK, NJ 07701-8489				
EXAMINER				
O HERN, BRENT T				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
12/15/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/534,950

**Applicant(s)**

SAITO ET AL.

**Examiner**

Brent T. O'Hern

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claims*

1. Claims 1-9 are pending.

## WITHDRAWN REJECTIONS

2. All rejections of record in the Office Action mailed 9 July 2007 have been withdrawn due to Applicant's amendments in the Paper filed 18 November 2008.

## NEW REJECTIONS

### *Claim Rejections - 35 USC § 103*

3. Claims 1-5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liao (WO 90/05460) in view of Qiang, *The production of Starch modified by alkenyl succinic anhydrides and its use in food industry* (2000), see Applicant's IDS filed 9/15/2006 and Hamm et al. (US 2003/0203096).

Liao ('460) teaches an acidic emulsified mayonnaise-like food without eggs, where the content of protein is less than 0.5% by mass, edible oil, vinegar, salt, polysaccharides, and seasonings (*See p. 4, l. 3 to p. 6, l. 26.*), however, fails to expressly disclose an esterified compound composed of a potato starch or a hydrolysate thereof and an alkenylsuccinic acid, an esterified compound composed of waxy cornstarch or a hydrolysate thereof and alkenylsuccinic acid wherein the content of the esterified compound is 0.1 to 5.0% by mass of the total mass of the acidic emulsified mayonnaise-like food, and a thickening polysaccharide being 0.01 to 2.5% by mass of the total mass of the acidic emulsified mayonnaise-like food, wherein the mass ratio of the esterified compound to the thickening polysaccharide is from 2:1 to 10:1.

However, Qiang teaches using an octenyl succinate starch which is an esterified compound comprising a starch or hydrosate and an alkenylsuccinic acid at 1% and xanthan gum at 0.05% in salad dressings for the purpose of improving the dispersion of the substances in the product, emulsion stability, appearance and taste (*See entire document.*). Regarding the mass ratio of claim 5, said ratio is typical and obtainable through routine optimization for a person having ordinary skill in the art.

Hamm ('096) teaches corn starch, waxy corn starch and potato starch as being alternative substitutes for mayonnaise-like sauce bases (*See para. 32.*) for the purpose of providing a thickened, stable sauce base (*See para. 32.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to use the above starch and gum as taught by Qiang and Hamm ('096) in Liao ('460) and the above ratios in order to provide a thickened food substance having improved stability, appearance and taste.

4. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liao (WO 90/05460) in view of Qiang, *The production of Starch modified by alkenyl succinic anhydrides and its use in food industry* (2000), Chen et al., *Preparation of Starch Sodium Alkenyl Succinate* (2000), see Applicant's IDS filed 9/15/2006 and Hamm et al. (US 2003/0203096).

Liao ('460), Qiang and Hamm ('096) teach the food product discussed above, however, fail to expressly disclose wherein the degree of substitution of the ester groups are from 0.005 to 0.020.

However, Chen teaches using cornstarch to prepare alkenyl succinate starch with a degree of substitution of ester groups of 0.018, 0.017, 0.007, etc. for the purpose of providing a thickened food (*See entire document.*). Furthermore, as discussed above, corn starch, waxy corn starch and potato starch have similar compositions and structures and are substantially interchangeable.

Therefore, it would have been obvious to use a starch with the substitution as taught by Chen in Liao ('460) in order to provide a thickened food.

#### **ANSWERS TO APPLICANT'S ARGUMENTS**

5. In response to Applicant's arguments (*p. 6, para. 4 to p. 7, para. 2 of Applicant's Paper filed 18 November 2008*) that Liao ('460) does not teach a product having a smooth appearance, esterified compounds or the suggest the suppression of flavor deterioration, it is firstly noted that smooth appearance and suppression of flavor deterioration are not structural limitations set forth in the claims. Furthermore, Liao ('460) is not cited for teaching the esterified compounds.

6. In response to Applicant's arguments (*p. 8, paras. 1-3 of Applicant's Paper filed 18 November 2008*) that Qiang does not teach starch, potato starch, waxy corn starch and alkenylsuccinic acid, a smooth appearance and no basis for combining the references, it is firstly noted as discussed above that a smooth appearance is not a claimed limitation. Qiang does teach octenylsuccinic acid, which is an alkenylsuccinic acid and starch octenyl succinate which is a starch (*See pp. 28-30.*) as discussed above and not rebutted by Applicant. Furthermore, the various types of starches are interchangeable as known in the art and illustrated by Hamm ('096). Furthermore,

combining the references provides a product with improved stability, appearance and taste, thus, clear motivation to combine.

7. In response to Applicant's arguments (*p. 9, para. 1 to p. 11, para. 2 of Applicant's Paper filed 18 November 2008*) that it would not have been obvious to provide the substitution as taught by Chen because corn starch and potato starch are not interchangeable and waxy corn starch is different from corn starch and Chen does not teach a smooth appearance, suppression of flavor deterioration and viscosity reduction, it is firstly noted as discussed above that a smooth appearance, suppression of flavor deterioration and viscosity reduction are not claimed limitations. Furthermore, as discussed above, Hamm ('096) teaches corn starch, waxy corn starch and potato starch as being alternative substitutes for mayonnaise-like sauce bases (*See para. 32.*) for the purpose of providing a thickened, stable sauce base (*See para. 32.*). Additionally, Applicant does not set forth any evidence or analysis illustrating how any one of the starches are non obvious variants of each other or present unexpected results.
8. In response to Applicant's arguments (*p. 10, para. 1 of Applicant's Paper filed 18 November 2008*) that Chen does not teach the low protein levels, it is noted that Chen is not cited for such but rather Liao ('460) which teaches an egg-free product.
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571)272-0496. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BTO/  
Brent T. O'Hern  
Examiner, Art Unit 1794  
December 10, 2008

/Elizabeth M. Cole/  
Primary Examiner, Art Unit 1794